include modified active surveillance, contact isolation, cohorting patients with carbapenem resistant Gram-negative pathogens, 5 moment hand hygiene, environmental cleaning, as well as monitoring healthcare workers and providing prompt feedback. These strategies must be modified to fit the local setting, organizational culture, and infrastructure. Intensified efforts in infection control programs and antibiotic stewardship serve as key components for long-term success. Given the limited information of infection control for carbapenem resistant Gram-negative pathogens in resource-limited setting, additional well-designed studies are needed to explore various aspects of outcomes of antimicrobial stewardship and infection control in resource-limited settings.

http://dx.doi.org/10.1016/j.ijid.2012.05.072

Type: Sponsored Symposium

Final Abstract Number: 17.001
Session: Important Childhood Infectious Diseases and Vaccinations to Prevent Them
Date: Friday, June 15, 2012
Time: 10:15-12:15
Room: Ballroom B

Polio eradication – Incorporating IPV more broadly

E. Vidor

Sanofi Pasteur, Lyons, France

While the oral poliovirus vaccine (OPV) has been an important tool in moving towards global eradication of poliomyelitis, its continued use is associated with the ongoing emergence of circulating vaccine-derived polioviruses (cVDPVs) and the sporadic occurrence of vaccine-associated paralytic poliomyelitis (VAPP) cases. Additionally, sub-optimal and geographically inconsistent seroconversion rates following OPV administration further confound the goal of global eradication.

The inactivated poliovirus vaccine (IPV), however, is not associated with cVDPVs or VAPP, and results in more consistent post-vaccination seroconversion rates. With these advantages in mind, it is clear that IPV can play a vital role in global poliomyelitis eradication, but IPV is less straightforward to administer and is claimed to be more expensive to deploy than OPV. Mixed and combined OPV/IPV schedules can be used to maximize the benefits of both vaccines.

The WHO considers that IPV could have an important role to play in low- to middle-income countries, where polio is particularly difficult to eradicate due to the continued use of OPV. There are various possibilities, each with its own pros and cons and variable feasibility, to promote a broader incorporation of IPV in such countries, including; fractional doses administered intradermally; development of new adjuvants for IPV antigens; an intramuscular schedule with a reduced number of doses; or the use of whole-cell pertussis (wP), rather than the more expensive acellular pertussis antigens, in combination with IPV (eg, hexavalent wP-IPV-containing vaccines). In addition, the use of standalone IPV following previous OPV doses could also reduce the immunity gap that is present in many pediatric populations.

The WHO currently envisages the cessation of wild-type poliovirus circulation by 2014 through use of IPV, followed by continued IPV use to assure and maintain global eradication.

http://dx.doi.org/10.1016/j.ijid.2012.05.073

Final Abstract Number: 17.002
Session: Important Childhood Infectious Diseases and Vaccinations to Prevent Them
Date: Friday, June 15, 2012
Time: 10:15-12:15
Room: Ballroom B

The evolution of pertussis vaccines and vaccination programs

U. Thisyakorn

Chulalongkorn University, Bangkok, Thailand

Pertussis, sometimes called whooping cough, is a highly contagious disease that remains an important cause of death worldwide, more particularly in developing countries. Its mortality occurs largely in infants less than 1 year of age, especially among those who have not completed their primary vaccinations.

Diphtheria and tetanus toxoids combined with whole cell *Bordetella pertussis* (DTwP) vaccines were developed and licensed during the 1940s, have been widely used for over 60 years, and have been central to the WHO Expanded Program on Immunization (EPI) since its inception in 1974, leading to considerable impact in controlling pertussis. However, there are still global disparities with regard to vaccine use and coverage.

Concerns about the reactogenicity of DTwP vaccines led to reduced immunization coverage and a subsequent increase in disease incidence in some countries. This prompted the development of acellular (aP) pertussis vaccines, which have a considerably better safety profile.

Currently, DTaP vaccines – sometimes combined with other antigens – are used in the national immunization programs in Canada, the United States, various European countries (eg, Denmark, France, Germany, Ireland, Italy, Spain, Sweden, UK), Asia (eg, Japan, South Korea), Australia, Costa Rica, Mexico, South Africa, and Turkey. National surveillance programs and specific studies in Europe and North America have demonstrated that the licensed aP vaccines, regardless of the number of acellular pertussis components contained therein, have substantial effectiveness in preventing pertussis when used comprehensively among infants and young children.

The broader deployment of aP vaccines and childhood combined vaccines is of considerable public health interest. Experience with the use of these vaccines will be presented.

http://dx.doi.org/10.1016/j.ijid.2012.05.074

Type: Sponsored Symposium

Final Abstract Number: 17.003
Session: Important Childhood Infectious Diseases and Vaccinations to Prevent Them
Date: Friday, June 15, 2012
Time: 10:15-12:15
Room: Ballroom B

Pentavalent and hexavalent combination vaccines of today and tomorrow

S. Madhi

National Institute for Communicable Diseases (NICD), Johannesburg, South Africa

Vaccines are cost-effective public health tools for the prevention and control of infectious diseases. However, disparity in access to health care remains a major hurdle to accessing life-saving